

Claim Amendments

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25. (amended) ~~The system of claim 15 further comprising A~~

relocatable security inspection system, comprising:

a support beam section having a first end and a second end;

a first leg section pivotally connected to the first end of the support beam section, the first leg section pivotable between an imaging position in which the support beam section and the first leg section are substantially perpendicular to one another, and a transport position in which the support beam section and the first leg section are substantially parallel to one another;

a second leg section pivotally connected to the second end of the support beam section, the second leg section pivotable between an imaging position in which the support beam section and the second leg section are substantially perpendicular to one another and a transport position in which the support beam section and the second leg section are substantially parallel to one another; and

a locking mechanism disposed on at least one of the support beam section and the first and second leg sections for detachably connecting the inspection system to a delivery vehicle.

26. (cancelled)

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34. (cancelled)

35. (amended) A method of deploying a security inspection system from a delivery vehicle to an inspection site, the inspection system including a frame having first and second leg sections pivotally connected to opposite ends of a support beam section, comprising the steps of:

activating a deployment mechanism located on the delivery vehicle;

moving the frame into an X-ray imaging position via the deployment mechanism;

inclining a bed section of the delivery vehicle until a base section of at least one of the first and second leg sections comes into contact with at least one of a surface of the inspection site and an object located on the surface of the inspection site; and

detaching the frame from the bed section of the delivery vehicle such that the frame comes to rest in a substantially upright position on the surface of the inspection site.

36. (original) The method of claim 35 wherein the step of moving the frame into an X-ray imaging position comprises moving the first and second leg sections away from one another such that the support beam section pivots into a locked position in which the support beam is substantially perpendicular to the first and second leg sections.

37. (original) The method of claim 35 wherein the inclining

step comprises inclining the bed section until a wheel located on the base portion of at least one of the first and second leg sections engages a track secured to the surface of the inspection site.

38. (original) The method of claim 35 wherein the inclining step comprises inclining the bed section until a plurality of tires located on the base portions of the first and second leg sections come into contact with the surface of the inspection site.

39. (amended) A method of deploying a security inspection system from a delivery vehicle to an inspection site, the inspection system including a frame having first and second leg sections pivotally connected to opposite ends of a support beam section, the support beam section comprising first and second scanner segments pivotally connected to one another, the method comprising the steps of:

activating a deployment mechanism located on the delivery vehicle;

moving the first and second leg sections away from one another via the deployment mechanism such that the support beam section pivots into an imaging position in which the first and second scanner segments are locked into place substantially linear to one another, and substantially perpendicular to the first and second leg sections;

inclining a bed section of the delivery vehicle until a base portion of at least one of the first and second leg sections comes

into contact with at least one of a surface of the inspection site and an object located on the surface of the inspection site; and

detaching the frame from the bed section of the delivery vehicle such that the frame comes to rest in a substantially upright position on the surface of the inspection site

40. (original) The method of claim 39 wherein the inclining step comprises inclining the bed section until a wheel located on the base portion of at least one of the first and second leg sections engages a track secured to the surface of the inspection site.

41. (original) The method of claim 39 wherein the inclining step comprises inclining the bed section until a plurality of tires located on the base portions of the first and second leg sections come into contact with the surface of the inspection site.

42. (amended) ~~The system of claim 3~~ A relocatable security inspection system, comprising:

a frame having first and second leg sections spaced apart from one another, the frame defining an inspection area and wherein the frame is movable along a dimension of the object;

an X-ray source disposed on the frame for generating an X-ray beam into the inspection area toward the object;

a detector disposed on the frame distally from the X-ray source for receiving the X-ray beam after the X-ray beam passes through the object, and for producing an output signal representative of the

objects and contents thereof;

an image processor for converting the output signal into a visual image of the object and contents thereof; and

a self-propelling drive attached to the frame for moving the frame wherein the self-propelling drive further comprises:

a light source that emits a light beam representing the desired path of travel of the frame, the light source being positioned to one side of the frame;

a light sensor mounted to the frame and that receives light from the light source and that detects whether the frame is straying from the desired path of travel; and

a processor to provide instructions to the frame to correct its path of travel based on information from the light sensor.

43. (original) The system of claim 42 wherein the light sensor further comprises a lens, and at least two photosensors.

44. (amended) The system of claim 42 wherein the light source and light sensor guide the forward movement of the frame, and a second light source is positioned to the other side of the frame, and a second light sensor is mounted on the other side of the frame, said second light source and second light sensor guiding the reverse movement of the frame.

45. (amended) The system of claim 42, further comprising an end of travel marker positioned to one side of the frame; and a sensor mounted to the frame that senses the end of travel marker to stop the frame.

46. (amended) The system of claim 45 wherein the sensor senses the end of travel marker to stop the forward movement of the frame, and a second end of travel marker is positioned to the other side of the frame, and a second sensor is mounted on the other side of the frame, wherein said second sensor senses the second end of travel marker to stop the reverse movement of the frame.

47. (amended) (amended) ~~The system of claim 11~~ A relocatable security inspection system, comprising:

a frame having first and second leg sections spaced apart from one another, the frame defining an inspection area and wherein the frame is collapsible via a plurality of hinges [1.];

an X-ray source disposed on the frame for generating an X-ray beam into the inspection area toward the object;

a detector disposed on the frame distally from the X-ray source for receiving the X-ray beam after the X-ray beam passes through the object, and for producing an output signal representative of the objects and contents thereof; and

an image processor for converting the output signal into a visual image of the object and contents thereof.

48. (cancelled)

49. (cancelled)

50. (cancelled)

51. (amended) ~~The method of claim 32 further comprising the~~

~~step of~~ A method of inspecting an object, comprising the steps

of:

deploying an X-ray imaging scanner from a delivery vehicle into
an imaging position wherein an inspection area is defined by the
scanner;

generating an X-ray beam from the scanner into the inspection
area toward an object to be imaged;

detecting the X-ray beam after the X-ray beam passes through the
object;

producing an output signal representative of the object and
contents thereof;

converting the output signal into a visual image of the object
and contents thereof;

moving the scanner relative to the object to image the object
wherein the step of moving the scanner comprises self-propelling the
scanner relative to the object; and

regulating the speed and/or alignment with a light source, a
light sensor, and a processor.

52. (cancelled)

53. (cancelled)

54. (cancelled)